



Indian Institute of Technology Hyderabad
Advertisement No. IITH/March-2022/Faculty/1

Starting date of applications: 10.03.2022
Closing date of applications: 15.04.2022 05:30 pm

1. General Information:

IIT Hyderabad (IITH), established in 2008, is ranked 8th (NIRF) among the Engineering institutions in the country for the third consecutive year, and ranked among the top 8 Indian Engineering institutes in the QS World Rankings-2022. This year we have also bagged 7th rank in national ARIIA rankings. It has 3900+ students (1100+ PhD students), 250+ faculty and 270+ staff. With about 6600+ Scopus publications, 1620+ projects worth of Rs. 575+ Crores, 210+ patents and 100+ startups, IITH is one of the fastest growing institutions in the Country. IITH has been striving for excellence passionately with a motto of Inventing and Innovating in Technology for Humanity (IITH).

IIT Hyderabad invites applications from exceptionally bright and motivated Indian Nationals or OCIs with an established record of independent, high quality research and commitment to teaching for positions of Assistant Professor, Associate Professor and Professor at IIT Hyderabad (www.iith.ac.in) in the following Departments. **All the three levels are not being advertised in the current round by certain departments, details of which are provided in Section 4.**

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| ❖ Artificial Intelligence | ❖ Electrical Engineering |
| ❖ Biomedical Engineering | ❖ Entrepreneurship and Management |
| ❖ Biotechnology | ❖ Liberal Arts |
| ❖ Chemical Engineering | ❖ Materials Science and Metallurgical Engineering |
| ❖ Chemistry | ❖ Mathematics |
| ❖ Civil Engineering | ❖ Mechanical and Aerospace Engineering |
| ❖ Computer Science & Engineering | ❖ Physics |
| ❖ Design | |

For specializations required in these departments please see below. **Interested candidates may apply through an online portal <https://faculty.recruitment.iith.ac.in> and attach the relevant certificates / documents asked.**

Women candidates are especially encouraged to apply.

Reservation as per Government of India rules for SC/ST/OBC-NCL/EWS are applicable for all positions including Assistant Professors, Associate Professors and Professors in the above-mentioned departments. Necessary certificates must be enclosed with the application form. GOI policy on reservation of faculty positions also includes persons with Physical disability.

If a candidate is interested in applying to more than one department, he/she should submit a separate application for each of the departments of interest.

Recruitment will be based on the need in given areas within the department. However, exceptionally meritorious candidates in any area of specialization pertaining to the said department will also be considered.

The institute reserves the right to fill or not to fill any or all of the advertised posts. Mere fulfillment of the qualifications and experience requirement does not entitle the candidate to be called for an interview.

The Institute provides support to cover relocation expenses for a new faculty member, and also provides a significant start-up research grant. In addition, the Institute provides Cumulative Professional Development Allowance (CPDA) of Rs. 3 lakhs for every block of 3 years to meet the expenses for participating in international conferences, national conferences and paying the membership fee of various professional bodies and contingent expenses. The faculty and their families are covered by an attractive Contributory Health Services Scheme.

2. Description of posts and required qualifications:

2.1 Assistant Professor Grade I:

As per 7th CPC, the minimum pay to be fixed at Rs. 1,01,500 (Matrix pay level of 12) along with allowances. After completion of 3 years of satisfactory service, they may be placed in matrix level 13A1 along with allowances.

Qualification: The candidate must have a Ph.D. with consistently good academic record throughout.

Experience: At least 3 years in industrial/research/teaching experience after completion of PhD.

2.2 Assistant Professor Grade II:

Candidates without 3 years' industrial/research/teaching experience after completion of PhD applying for direct recruitment as Assistant Professor Grade I, may be taken as Assistant Professor Grade II and the minimum pay to be fixed at Rs. 98,200 (Matrix pay level of 10) along with allowances. Once selected in this position, the candidate will be considered for the post of Assistant Professor Grade I upon reaching the required work-experience.

For Assistant Professor Grade II and Assistant Professor Grade I positions, the candidates should be preferably below 35 years of age.

Seed Grant:

IITH provides a seed grant to new Faculty to get them started on their research, while they await the results of their project proposals submitted to external funding agencies. New faculty should apply within six months of joining for the Seed Grant. Assistant Professors are eligible for a Seed grant of up to Rs. 30 lakhs, which includes fellowship for one PhD student for 3 years.

2.3 Associate Professor:

As per 7th CPC, the minimum pay is to be fixed at Rs. 1,39,600 (Matrix pay level of 13A2) along with allowances.

Qualification: The candidate must have a Ph.D. with consistently good academic record throughout.

Experience: A minimum of 6 years in teaching/research/professional experience, of which 3 years should be at the level of Assistant Professor, Senior Scientific Officer/Senior Engineer in a research organization or industry.

Candidates should be preferably below 45 years of age.

2.4 Professor:

As per 7th CPC, the minimum pay to be fixed at Rs. 1,59,100 (Matrix pay level of 14A) along with allowances.

Qualification: The candidate must have a PhD with consistently good academic record throughout.

Experience: A minimum of 10 years in teaching/research/professional experience, of which at least 4 years should be at the level of Associate Professor in an academic institute or equivalent position in a research organization or industry.

The candidate should have demonstrated leadership in research in a specific area of specialization in terms of guidance of MTech and PhD students, and has a strong record of sponsored research, publications in reputed journals and referred conferences, patents, laboratory/course development and other recognized relevant professional activities.

Candidates should be preferably below 55 years of age.

3. Relaxation in age limit:

3.1 Age relaxation for various categories:

Category	Age relaxation
Reservation policy as per GoI norms is followed.	
SC/ST	5 years
OBC-NCL	3 years
PWD	Relaxation for PWD candidates: 15 years for SC/ST, 13 years for OBC-NCL and 10 years for General Category.

3.2 Reservation for 'Persons with Disabilities' with minimum of 40% disability: Reservations will be given as per the GOI guidelines.

3.3 The candidates submitting applications under the EWS category should upload a valid EWS Certificate issued for the current financial year. Income statement of the whole family need to be submitted.

3.4 OBC-NCL certificate should not be more than two financial years old from the last date

of application.

4. Particulars of specializations required in each department:

Note: IITH reserves the right to focus on specific areas for its recruitment. The fields mentioned below are meant to be indicative of the departments' current requirements, which may change without notice. However, outstanding candidates in any field relevant to the department will also be considered.

4.1 Artificial Intelligence

The department is seeking applications from suitable candidates for the posts of **Assistant Professor and Associate Professor**.

Candidates with outstanding research publication records in any area of Artificial Intelligence and its applications may apply. Candidates should have a strong academic background in any area of science and engineering but require an outstanding publication record with contributions in any area of AI and its applications, including interdisciplinary AI research. Successful candidates are expected to have a strong foundation in AI/ML, engage in cutting-edge AI research and be capable of offering Institute-wide courses in AI and ML to the growing community of AI users and practitioners at IITH.

For more details about the department, please visit <https://ai.iith.ac.in/>.

4.2 Biomedical Engineering

The department is seeking applications from suitable candidates for the posts of **Assistant Professor, Associate Professor and Professor**.

Assistant Professor: Candidates from all engineering and applied physics backgrounds who have done substantial and outstanding research work in biomedical engineering in their doctoral thesis and thereafter will be considered.

The areas for consideration are: Biomedical Instrumentation, Biomedical Devices, Biomedical Imaging and Image & Signal Processing; Experimental and Computational Biomechanics, Systems Biology; Brain-machine interfaces and Computational Biology, Neural Engineering; Biomimetic algorithms for AI, robotics for medicine

Associate Professor and Professor: Candidates with outstanding research records in any area of Biomedical Engineering may apply.

For more details about the department, please visit <https://bme.iith.ac.in/>.

4.3 Biotechnology

The department is seeking applications from suitable candidates for the posts of **Assistant Professor, Associate Professor and Professor**.

Assistant Professor: Department of Biotechnology at IIT Hyderabad is looking for faculties with extensive expertise in Bioinformatics, Systems biology, Mathematical biology.

Candidates should have a Ph.D. in Bioinformatics or Computer science or Mathematics and proven track record in the form of high-impact factor journal publications in bioinformatics tools and algorithm development. Candidates are expected to implement cutting-edge research and teaching programs in the field of Bioinformatics, Systems biology, Computational and AI based methods to study drug-design.

Associate Professor and Professor: Candidates with outstanding research publication records in any area of Bioinformatics and Biotechnology may apply.

For more details about the department, please visit <https://biotech.iith.ac.in/>.

4.4 Chemical Engineering

The department is seeking applications from suitable candidates for the posts of **Associate Professor and Professor**.

Associate Professor and Professor: Candidates with outstanding research records in any area of Chemical Engineering may apply.

For more details about the department, please visit <https://che.iith.ac.in/>

4.5 Chemistry

The department is seeking applications from suitable candidates for the posts of **Assistant Professor, Associate Professor and Professor**.

The candidates should have Bachelors'/Masters' degrees in Chemistry or related areas.

Assistant Professor: Applications are invited from candidates working in the areas of i) Machine learning in chemistry; ii) Development of electronic structure methods; iii) Polymer science and technology; iv) Pharmaceutical chemistry; and v) Fuel cell technology.

Associate Professor: Applications are invited from candidates working in the areas of i) Bio-inorganic and bioinspired catalysis; ii) Solid-state chemistry; and iii) Experimental laser spectroscopy of molecular clusters.

Professor: Applications are invited from candidates working in Molecular Dynamics and structure of chemical systems, Computational spectroscopy, and modelling using classical and quantum methods.

For more details about the department, please visit <https://chemistry.iith.ac.in/>.

4.6 Civil Engineering

The department is seeking applications from suitable candidates for the posts of **Assistant Professor, Associate Professor and Professor**.

Assistant Professor: The Department of Civil Engineering is looking for candidates with significant research work in the areas listed below. Candidates with outstanding academic records in other areas of Civil Engineering may also apply. The applicants must have

BTech/BE in Civil Engineering.

1. **Geotechnical Engineering:** Earthquake Geotechnical Engineering (Soil Dynamics), Geo-environmental Engineering, Numerical Methods in Geomechanics, Pile Foundations, Soil-Structure Interaction Engineering, Behaviour of Rocks (Rock Mechanics).
2. **Structural Engineering:** Structural and System Reliability, Stochastic/ Computational Mechanics, Structural Health Monitoring, Earthquake Engineering, Concrete Durability.
3. **Hydraulics and water resources engineering:** Hydroclimatology, Climate Sciences and Modeling, High-Performance Computing in Climate Modeling, Remote Sensing and GIS, Computational fluid dynamics and Computational Hydrology, Socioeconomic Hydrology, Eco-Hydrology, Field investigation of experimental watersheds, water resources system planning and management, agriculture water management Experimental hydraulics.
4. **Environmental Engineering:** Solid & Hazardous Waste management (including e-wastes and plastic wastes).
5. **Transportation Engineering:** Traffic operations and management, Transport infrastructure planning and design, Pavement analysis and design, Pavement materials and Pavement management systems, Transport economics and finance, Rail transportation, Air transportation.
6. **Construction Technology and Management:** All areas related to construction technology and management.

Associate Professor and Professor: Candidates with outstanding research records in any area of Civil Engineering may apply.

For more details about the department, please visit <https://civil.iith.ac.in/>.

4.7 Computer Science and Engineering

The department is seeking applications from suitable candidates for the posts of **Assistant Professor, Associate Professor and Professor**.

Assistant Professor: The Department of CSE at IIT Hyderabad invites applications with the following areas in focus: Artificial Intelligence/Machine Learning, Computer Architecture, Cloud and Distributed Computing, Computer Graphics/Virtual Reality, Cybersecurity, Databases and Information Management, Formal Methods, IoT, Operating Systems, Compilers/Program Analysis and Programming Languages, Software Engineering. Candidates in areas not mentioned above, with a proven record of publishing in top venues, are also welcome to apply.

Associate Professor: The Department of CSE at IIT Hyderabad invites applications with the following areas in focus: Artificial Intelligence/Machine Learning, Cybersecurity, Databases and Information Management, Compilers/Program Analysis and Programming Languages, Theoretical Computer Science. Exceptional candidates in areas not mentioned above, with an outstanding track record, are also welcome to apply.

Professor: The Department of CSE at IIT Hyderabad invites applications with the following areas in focus: Artificial Intelligence/Machine Learning, Cloud and Distributed Computing, Databases and Information Management, Formal Methods, Computer Networks, Operating Systems, Theoretical Computer Science. Exceptional candidates in areas not mentioned above, with an outstanding track record, are also welcome to apply.

Candidates found exceptional by the selection committee will be awarded a salary top-up for their first year funded by an endowment.

For more details about the department, please visit <https://cse.iith.ac.in/>.

4.8 Design

The department is seeking applications from suitable candidates for the posts of **Assistant Professor, Associate Professor and Professor.**

A PhD in Design/Creative Arts/Design Anthropology or in any relevant field of Design with demonstrable written output in the form of monographs, essays, journal papers, curatorial texts, editorials are essential. The department is looking for faculty engaged in the following domains in specific and any relevant fields of Design in General.

Domains: Printing, Painting, Sculpture, Applied Art, Film-making, Cinematography, Editing, Sound Design, Music Production, VFX and Animation, Visual Communication, Typography and Publication Design, Digital Media, Augmented Reality, Virtual Reality, Usability, User Interaction, Architectural Design, Textile Design, Furniture Design,

For more details about the department, please visit <https://design.iith.ac.in/>

4.9 Electrical Engineering

The department is seeking applications from suitable candidates for the posts of **Assistant Professor, Associate Professor and Professor.**

Assistant Professor: The Department of Electrical Engineering at IIT Hyderabad invites applications for faculty positions at the Assistant Professor level in all areas of Electrical Engineering with particular emphasis on

Control Engineering, Systems Theory, GaN, SiC and other new power devices for High/Medium power application, Electromagnetics and antennas, Communication systems hardware, Signal Processing, Queuing Theory, Quantum Information Theory, Machine Learning and Big Data, Analog and mixed signal circuit and system design, Monolithic Microwave Integrated Circuits, Digital VLSI Chip design, Instrumentation, CAD for VLSI and Packaging Technology, Radio Frequency & Analog VLSI Chip design, Microsystems and Nanodevices, Integrated Quantum photonics, Cognitive computing and machine learning VLSI systems, Memory Design, Hardware Security, Quantum Computing.

Associate Professor and Professor: Candidates with outstanding research records in any area of Electrical Engineering may apply.

For more details about the department, please visit <https://ee.iith.ac.in/>

4.10 Entrepreneurship and Management

The department is seeking applications from suitable candidates for the posts of **Assistant Professor and Associate Professor.**

Department of Entrepreneurship and Management, IIT Hyderabad is seeking applications from eligible candidates in the areas of Marketing, Finance and Accounting, Entrepreneurship and Technology & Innovation Management

For more details about the department, please visit <https://em.iith.ac.in/>

4.11 Liberal Arts

The department is seeking applications from suitable candidates for the posts of **Associate Professor and Professor**.

Associate Professor and Professor: Applications are invited in numerous areas, particularly the following: Economics, English, Psychology, Development Studies, Linguistics, Cognitive Science, English Language Teaching, & Performing Arts. Candidates with outstanding research records in any area of Liberal Arts may apply.

For more details about the department, please visit <https://lba.iith.ac.in/>.

4.12 Mathematics

The department is seeking applications from suitable candidates for the posts of **Assistant Professor and Associate Professor**.

Assistant Professor: Abstract Harmonic Analysis, Algebraic Geometry, Algebraic Topology, Functional Analysis, Group Theory and Generalizations, Manifolds and Cell Complexes, Number Theory, Operator Theory, Several Complex Variables and Analytic Spaces, Topological Groups and Lie Groups.

Associate Professor: Candidates with outstanding research records in any area of Mathematics may apply.

For more details about the department, please visit <https://math.iith.ac.in/>.

4.13 Mechanical and Aerospace Engineering

The department is seeking applications from suitable candidates for the posts of **Assistant Professor and Professor**.

Assistant Professor: Applications are solicited from applicants with a strong background in Mechanical and/or Aerospace Engineering in the following areas of expertise. Exceptional candidates in all areas of manufacturing are encouraged to apply.

- **Manufacturing Sciences:** Micro-manufacturing; Automation/controls and Industry 4.0; Digital & Smart (sensors, IIOT and data driven) manufacturing systems; Integrated product and process design systems; Circular and reconfigurable manufacturing processes; Processes for mass customization; Digital Twins: modeling, simulation and virtual reality; Machines and processes for micro and nano imprinting

Emphasis is on the above domains, but not limited to them. Exceptional candidates in all areas

of manufacturing are encouraged to apply.

- **Aerospace Engineering:** Aero-Thermodynamics; Aero-Thermoelasticity; Helicopter Dynamics; MAV/UAV design and flight controls; Advanced Propulsion Systems; Aircraft and Spacecraft Controls; Aerospace Structural Mechanics and Materials

Thermo-fluids Engineering and Mechanics & Design fields are not being considered for the current round.

Professor: Candidates with excellent academic and research records in the following areas of Mechanical and Aerospace Engineering may apply.

- Thermo-fluids Engineering
- Dynamics, Vibrations, Acoustics

For more details about the department, please visit <https://mae.iith.ac.in/>.

4.14 Materials Science & Metallurgical Engineering

The department is seeking applications from suitable candidates for the post of **Assistant Professor**.

Applications are solicited from candidates working in the field of

Computational Materials Science/Engineering: Materials informatics/genomics; First principles method development and applications to materials phenomena; Atomistic modeling of defects and deformation in materials; Modeling of deformation in materials - continuum plasticity, discrete dislocation plasticity, damage mechanics.

Exceptional candidates in other relevant areas of specialization may also be considered.

The applicants must have at least one degree in Materials Science/Metallurgical Engineering/Materials Engineering/Ceramics Engineering and related areas.

For more details about the department, please visit <https://msme.iith.ac.in/>.

4.15 Physics

The department is seeking applications from suitable candidates for the posts of **Assistant Professor, Associate Professor and Professor**.

Assistant Professor: Candidates with excellent academic records and outstanding publications in international journals in the following priority research areas are encouraged to apply:

- **Statistical Mechanics:** Soft-matter, Non-equilibrium Statistical Mechanics, Biological Physics.
- **Experimental High Energy Physics** (the candidate should have done PhD in CMS)
- **CMP (Experiments):** Superconducting Q bits, Topological Materials
- **Optics:** Quantum Optics, Adaptive Optics
- **Experimental Nuclear Physics**

- **Medical Physics:** Radiation therapeutic physics, Radiation Oncology Physics, Medical Imaging Physics, Nuclear Medicine Physics, and Non-ionizing Medical Radiation Physics.

Associate Professor and Professor: Candidates with excellent teaching records, outstanding research credentials in any area of Physics, proven track record of funding and PhD graduation may apply.

For more details about the department, please visit <http://physics.iith.ac.in/>.

For further information, please visit the website of IIT Hyderabad: www.iith.ac.in